

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A free fall simulator comprising:
a flight chamber;
a at least one fan means positioned below said flight chamber;
a noise attenuation housing substantially enclosing said at least one fan means;
and
a plurality of air intake openings in said housing.
2. (Original) The free fall simulator of claim 1 wherein said housing includes a canopy extending radially outwardly from said flight chamber.
3. (Currently Amended) The free fall simulator of claim 2 wherein said canopy includes an outer peripheral edge and said housing further includes at least one noise attenuation stack positioned at the peripheral edge of said canopy and wherein at least one of said plurality of air intake openings is positioned in said at least one stack at a point above said canopy.
4. (Original) The free fall simulator of claim 3 including a plurality of said stacks.
5. (Original) The free fall simulator of claim 4 including a wall section joined along a portion of said peripheral edge and between adjacent ones of said plurality of stacks.
6. (Currently Amended) The free fall simulator of claim 1 wherein said at least one fan means includes a plurality of fans, each of said fans being positioned in a at least one radially extending air intake duct having an air intake end and a fan positioned therein.
7. (Cancelled)

8. (Currently Amended) The free fall simulator of claim 7 6 wherein said housing includes an upper wall portion above said plurality of fans and said air intake ducts ~~eanopy~~ extending radially outwardly from said flight chamber.
9. (Currently Amended) The free fall simulator of claim 8 wherein said ~~eanopy~~ upper wall portion includes an outer peripheral edge and said housing further includes at least one noise attenuation stack positioned at the peripheral edge of said ~~eanopy~~ upper wall portion.
10. (Cancelled)
11. (Cancelled)
12. (Currently Amended) A free fall simulator comprising:
 - a flight chamber ~~having a lower end;~~
 - ~~a fan means comprising~~ a plurality of fans below said flight chamber and corresponding air inlet ducts extending radially outwardly from below ~~the lower end of~~ said flight chamber; ~~and~~
 - a noise attenuation stack in communication ~~connected with each of~~ said air inlet ~~ducts~~ chamber.
13. (Original) The free fall simulator of claim 12 wherein said noise attenuation stack includes an open top or a plurality of openings in its top.
14. (Currently Amended) A ~~pre-flight~~ free fall simulator comprising:
 - a flight chamber;
 - a at least one fan ~~means~~ positioned below said flight chamber;
 - a noise attenuation housing substantially enclosing said at least one fan ~~means~~;
 - a substantially closed hood above said flight chamber;
 - a plurality of openable and closeable louvers in said hood; and
 - one or more recirculation columns between said hood and said noise attenuation housing.

15. (Original) The ~~pre-flight~~ free fall simulator of claim 14 including a temperature control for controlling the temperature within said flight chamber.
16. (Original) A free fall simulator comprising:
 - a flight chamber;
 - an ingress/egress system allowing a user to enter and exit from said flight chamber or an area adjacent to said flight chamber, said ingress/egress system including an air lock door system including a pressure transition chamber between the ambient atmosphere and said flight chamber.
17. (Original) The free fall simulator of claim 16 wherein said air lock door system includes a revolving door.
18. (Original) The free fall simulator of claim 16 wherein said air lock door system includes a pair of air lock doors defining said transition chamber.
19. (Original) A method of free fall simulation comprising:
 - providing a flight chamber with sufficient dynamic pressure to support a user against the force of gravity;
 - providing an air lock door system with a pressure transition chamber between the ambient atmosphere and said flight chamber;
 - maintaining said flight chamber with sufficient dynamic pressure to support a user against the force of gravity while users enter or exit from said flight chamber or an area adjacent to said flight chamber through said air lock door system.
20. (Original) The method of claim 19 wherein said air lock door system is a revolving door.

21. (New) The free fall simulator of claim 6 wherein said housing defines an air intake chamber and wherein said air intake ducts and said air intake ends thereof are positioned within and in communication with said air intake chamber.

22. (New) The free fall simulator of claim 9 wherein said at least one stack includes a stack portion extending above said upper wall portion and wherein at least one of said plurality of air intake openings is positioned in said stack.

23. (New) The free fall simulator of claim 22 wherein said stack portion includes a top end and wherein said at least one air intake opening is positioned in said top end.